

IN THE CLAIMS

Please amend Claim 1 as follows:

1. (Previously Presented) A method of generating a cyclic sequence of frequencies comprising:  
selecting a number of frequencies in succession from a list of usable frequencies by means of a sequence of indices indicating respective positions in the list,  
deriving said sequence of indices from a kernel,  
controlling a frequency generator arrangement to repeatedly generate the succession of frequencies so selected, and -  
updating the list in respect of the frequencies it contains between successive selections of a frequency therefrom, the detail of each updating being dependent upon the part of the succession of frequencies so far selected.
2. (Original) A method as claimed in Claim 1, wherein each updating is such as to result in a list which contains a respective subset of the frequencies contained in the list from which the first frequency of the succession of frequencies was selected, wherein each updating is such as to result in a list from which is excluded any frequency which differs from the frequency last

selected by less than a predetermined amount, and wherein the updating immediately prior to the selection of the last frequency of the succession is such as to result in a list from which is also excluded any frequency which differs from the frequency first selected by less than said predetermined amount.

3. (Original) A method as claimed in Claim 2, wherein, if  $L$  denotes the length of the complete succession of frequencies,  $l$  denotes the length of the part of the succession of frequencies so far selected at any given time, and  $m$  is a predetermined integer greater than 1 and less than  $L$ ,

each updating which occurs when  $l < m$  is such as to result in a list from which is also excluded any frequency which differs from any frequency so far selected by less than said predetermined amount,

each updating which occurs when  $m \leq l < L$  is such as to result in a list from which is also excluded any frequency which differs from any of the  $(m - 1)$  frequencies most recently selected by less than said predetermined amount, and

each updating which occurs when  $(L - m) < l < L$  is such as to result in a list from which is also excluded any frequency which differs from any of the  $m - (L - l)$  frequencies first selected by less than said predetermined amount.

4. (Original) A method as claimed in Claim 1, wherein each updating is such as to result in a list which contains a respective subset of the frequencies contained in the list from which the first frequency of the succession of frequencies was selected, and wherein, if  $L$  denotes the length of the complete succession of frequencies,  $l$  denotes the length of the part of the succession of  $L$  frequencies so far selected at any given time, and  $m$  is a predetermined integer greater than 1 and less than  $L$ ,

each updating which occurs when  $l < m$  is such as to result in a list from which is excluded all frequencies other than those which differ by less than a predetermined amount from the least number of the frequencies so far selected,

each updating which occurs when  $m \leq l \leq (L - m)$  is such as to result in a list from which is excluded all frequencies other than those which differ by less than said predetermined amount from the least number of the  $(m - 1)$  frequencies most recently selected, and

each updating which occurs when  $(L - m) < l < L$  is such as to result in a list from which is excluded all frequencies other than those which differ by less than said predetermined amount from the least number of the  $(m - 1)$  frequencies most recently selected and the  $m - (L - l)$  frequencies first selected.

5. (Previously Presented) A method as claimed in Claim 1, wherein the value of each index  $i$  of the sequence of indices is given by

$$i = |f(ID)| \text{ modulo } W$$

where  $ID$  is said kernel and  $W$  is the current length of the list.

6. (Original) A method as claimed in Claim 5, wherein the value of each index  $i$  of the sequence of indices is a function of the ordinal number, in the succession of frequencies, of the frequency being selected by that index.

7. (Original) A method as claimed in Claim 6, wherein the value of each index  $i$  is given by

$$i = |M*(ID) + N + 1| \text{ modulo } W$$

where  $M$  is the ordinal number, in the succession of frequencies, of the frequency being selected by that index,  $ID$  is non-zero, and  $N$  is the number of frequencies contained in the list from which the first frequency of the succession of frequencies is selected.

8. (Original) Apparatus for generating a cyclic sequence of frequencies, comprising a frequency selector for

deriving a sequence of indices from a kernel and using these indices to indicate respective positions in a list of usable frequencies to thereby select a succession of frequencies from the list, and a frequency generator arrangement for repeatedly generating the succession of frequencies so selected, wherein the frequency selector includes a list updater for updating the list in respect of the frequencies it contains between successive selections of a frequency therefrom in such manner that the detail of each updating is dependent upon the part of the succession of frequencies so far selected.

9. (Previously Presented) A radio communication system which employs frequency hop sequences generated by a method as claimed in Claim 1.

10. (Original) A radio communication system which includes apparatus as claimed in Claim 8 for generating frequency hop sequences.